USER MANUAL

10A Bin Dumper

Number 6801202 EN

cascade® corporation

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INTRODUCTION

This manual is for the Cascade 10A Bin Dumper. Contents include an Operator's Guide, Installation Instructions and Periodic Maintenance. All specifications are shown in US and (Metric) units where applicable.

IMPORTANT: All hoses, tubes and fittings on the attachments are SAE O-Ring Face Seal.

Special Definitions

The statements shown appear throughout this manual where special emphasis is required. Read all WARNINGS and CAUTIONS before proceeding with any work. Statements labeled IMPORTANT and NOTE are provided as additional information of special significance or to make the job easier.

WARNING – A statement preceded by WARNING is information that should be acted upon to prevent bodily injury. A WARNING is always inside a ruled box.

CAUTION – A statement preceded by CAUTION is information that should be acted upon to prevent machine damage.

IMPORTANT – A statement preceded by IMPORTANT is information that possesses special significance.

NOTE – A statement preceded by NOTE is information that is handy to know and may make the job easier.

WARNING: Rated capacity of the truck/ attachment combination is a responsibility of the original truck manufacturer and may be less than shown on the attachment nameplate. Consult the truck nameplate.

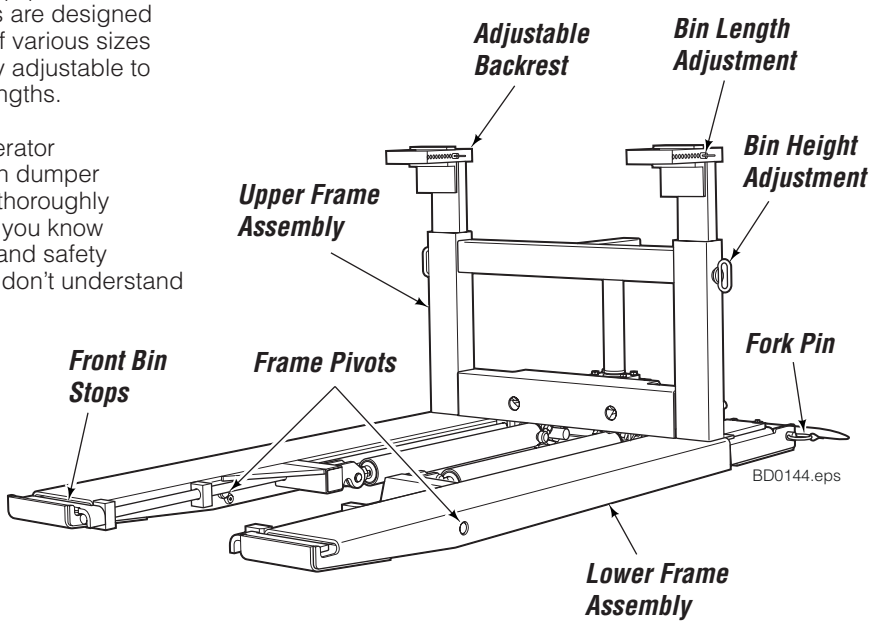
WARNING: Do not operate this attachment unless you are a trained and authorized lift truck driver.

OPERATION

This section contains operating instructions for the Cascade 10A Bin Dumper. It will help you avoid common errors which often cause damage to the equipment or product being handled. 10A Bin Dumpers are designed to handle agricultural and industrial bins of various sizes and capabilities. The backrest is manually adjustable to accommodate different bin heights and lengths.

This information is intended to simplify operator understanding about effective and safe bin dumper use and operation. Read this information thoroughly before operating the attachment. Be sure you know and understand all operating procedures and safety precautions. If you have any questions or don't understand a procedure, ask your supervisor.

Emphasize Safety! Most accidents are caused by operator carelessness or misjudgment. You must watch for poorly maintained equipment and hazardous situations and correct them.



No riders

No reaching through mast

No standing under load

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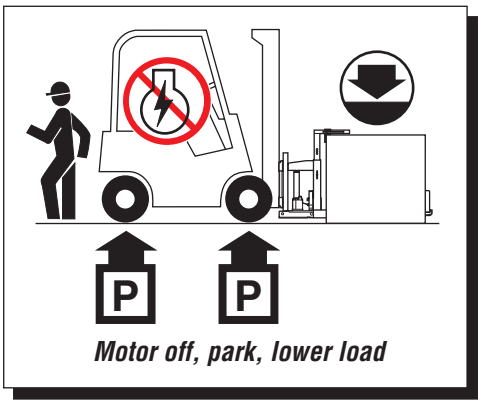
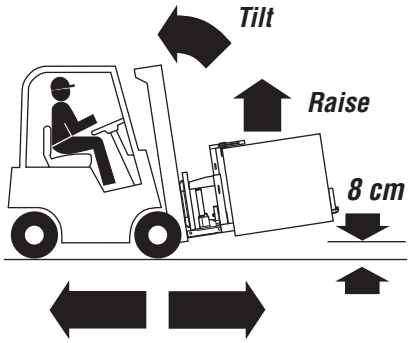
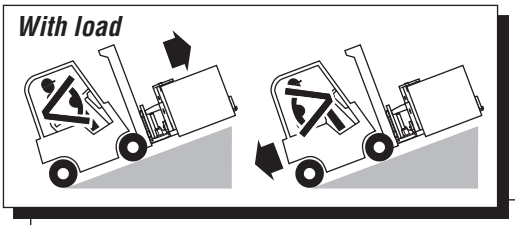
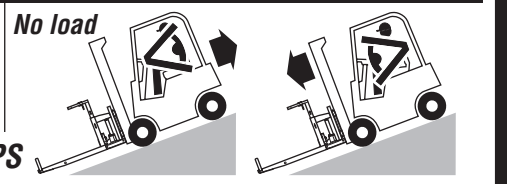


Motor off, park, lower load



Traveling empty

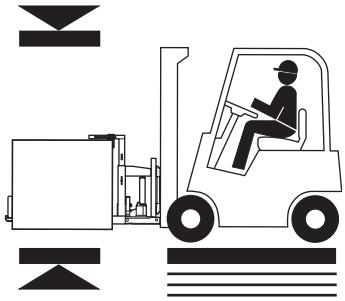




RAMPS

No parking on ramp

No turning on ramp



Watch clearances

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TRAFFIC

Observe

Workers

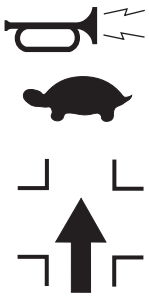
Stops

Wet floors

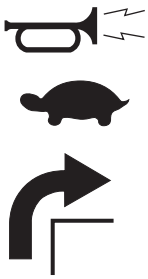
Bumps

Dips

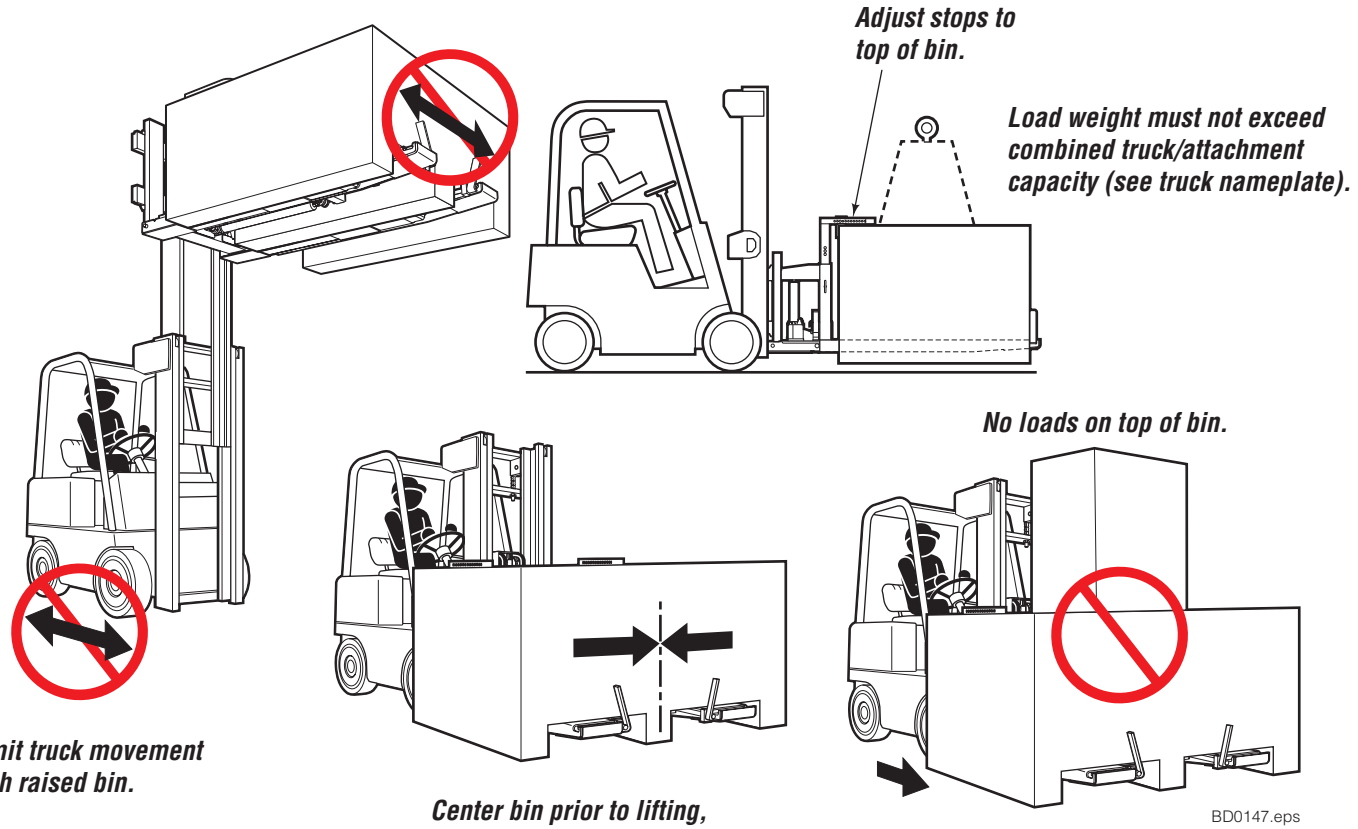
Slow for two-way traffic



Sound horn, slow at intersection



Sound horn, slow at corner


Adjust stops to top of bin.
Load weight must not exceed combined truck/attachment capacity (see truck nameplate).
No loads on top of bin.
Limit truck movement with raised bin.
Center bin prior to lifting, traveling or dumping.
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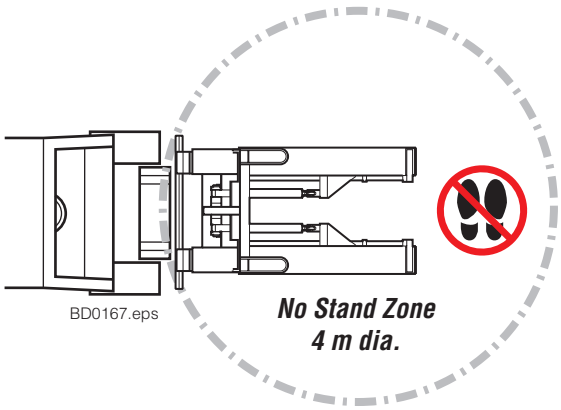
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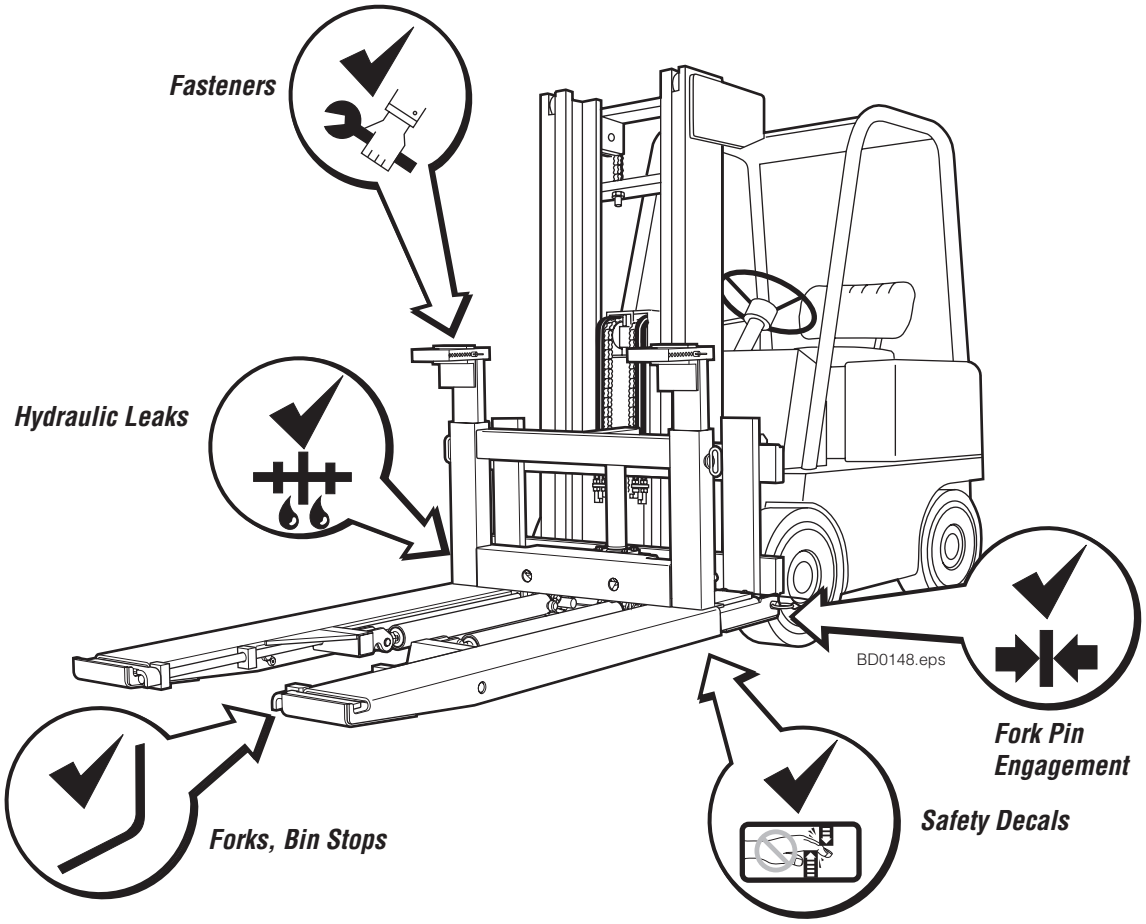
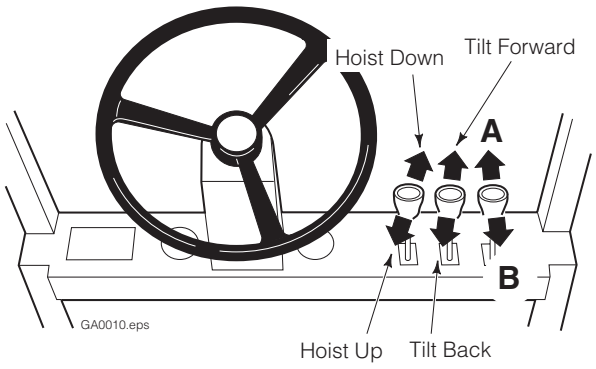
No Stand Zone
4 m dia.

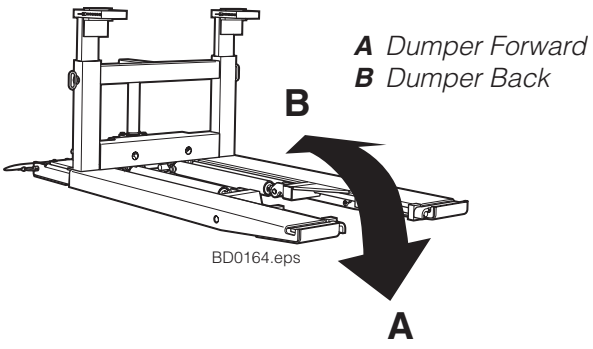
Daily Inspection

Check items each day. Report problems to your supervisor. See service manual for maintenance and repair procedures.



Bin Dumper Operation – Auxiliary Valve Functions

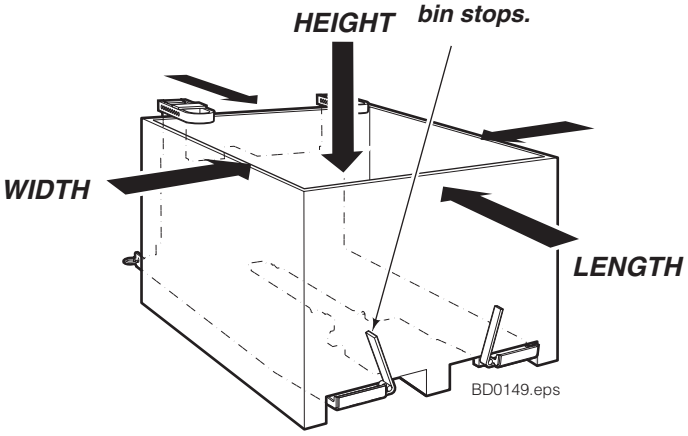




PICKING UP, DUMPING LOADS

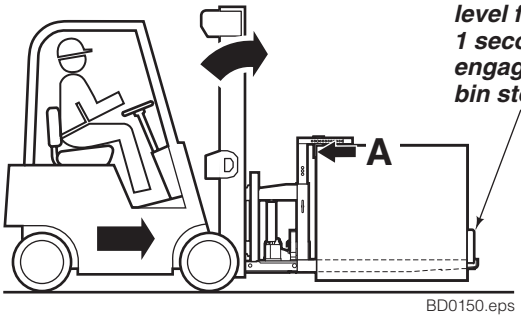
1 *Verify bin fits attachment*

Adjust stops.
Height: Allow up to 38 mm clearance with top of bin.
Length: Allow maximum 6 mm clearance from front bin stops.

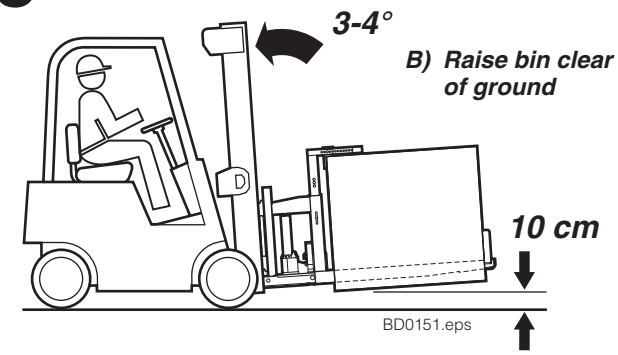


2 *A) Level forks, drive forward, bin against upper bin stops*

B) Move control level forward 1 second to engage front bin stops

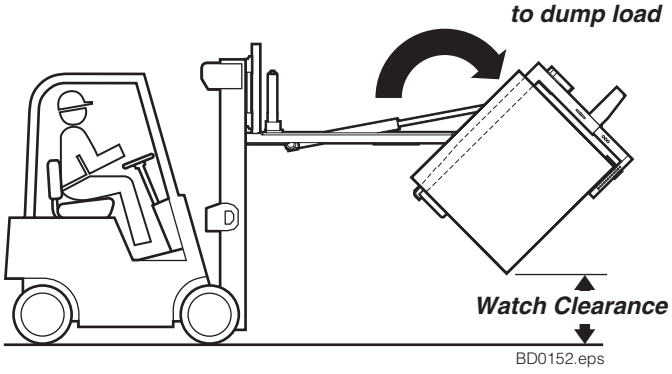


3 *A) Tilt back for transport*



4 *A) Level bin, raise for dump clearance*

B) Move control lever forward to dump load



WARNING: When operating and maintaining industrial trucks equipped with attachments, you should pay particular attention to the following information. You should be familiar with this information for truck and attachment operation. **Ask your employer for complete operation information.**

General Requirement

Modifications and additions which affect capacity and safe operation shall not be performed by the customer or user without manufacturers prior written approval. Capacity, operation and maintenance instruction plates, tags or decals shall be changed accordingly.

If the truck is equipped with front-end attachments other than factory installed attachments, the user shall request that the truck be marked to identify the attachments and show the appropriate weight of the truck and attachment combination at maximum elevation with load laterally centered.

The user shall see that all nameplates and markings are in place and maintained in a legible condition.

Safety Guards

If the type of load presents a hazard, the user shall equip fork trucks with a vertical load backrest extension in accordance with the following.

All new powered industrial trucks acquired and used by an employer after February 15, 1972 shall meet the design and construction requirements for powered industrial trucks established in the “American National Standard for Powered Industrial Trucks, Part II, ANSI B56.1”, except for vehicles intended primarily for earth moving or over-the-road hauling.

Operator Training

Only trained and authorized operators shall be permitted to operate a powered industrial truck. Methods shall be devised to train operators in the safe operation of powered industrial trucks.

Truck Operations

Trucks shall not be driven up to anyone standing in front of a bench or other fixed object.

No person shall be allowed to stand or pass under the elevated portion of any truck, whether loaded or empty.

Unauthorized personnel shall not be permitted to ride on powered industrial trucks. A safe place to ride shall be provided where riding of trucks is authorized.

The employer shall prohibit arms or legs from being placed between the uprights of the mast or outside the running lines of the truck.

When a powered industrial truck is left unattended, load engaging means shall be fully lowered, controls shall be neutralized, power shall be shut off and brakes set. Wheels shall be blocked if the truck is parked on an incline.

A powered industrial truck is unattended when the operator is 7 meter or more away from the vehicle which remains in his view, or whenever the operator leaves the vehicle and it is not in his view.

When the operator of an industrial truck is dismounted and within 7 meter of the truck still in his view, the load engaging means shall be fully lowered, controls neutralized and the brakes set to prevent movement.

A safe distance shall be maintained from the edge of ramps or platforms while on any elevated dock or platform or freight car. Trucks shall not be used for opening or closing freight doors.

A load backrest extension shall be used whenever necessary to minimize the possibility of the load or part of it from falling rearward.

Traveling

The driver shall be required to slow down and sound the horn at cross isles and other locations where vision is obstructed. If the load being carried obstructs forward view, the driver shall be required to travel with the load trailing.

When ascending or descending grades in excess of 10 percent, loaded trucks shall be driven with the load upgrade.

On all grades the load and load engaging means shall be tilted back if applicable, and raised only as far as necessary to clear the road surface.

Loading

Only stable or safely arranged loads shall be handled. Caution shall be exercised when handling off-center loads which cannot be centered.

Only loads within the rated capacity of the truck shall be handled.

The long or high (including multiple-tiered) loads which may affect capacity shall be adjusted.

Trucks equipped with attachments shall be operated as partially loaded trucks when not handling a load.

A load engaging means shall be placed under the load as far as possible; the mast shall be carefully tilted backward to stabilize the load.

Extreme care shall be used when tilting the load forward or backward, particularly when high tiering. Tilting forward with load engaging means elevated shall be prohibited except to pick up a load. An elevated load shall not be tilted forward except when the load is in a deposit position over a rack or stack. When stacking or tiering, only enough backward tilt to stabilize the load shall be used.

Operation of the Truck

If at any time a powered industrial truck is found to be in need of repair, defective, or in any way unsafe, the truck shall be taken out of service until it has been restored to safe operating condition.

Maintenance of Industrial Trucks

Any power-operated industrial truck not in safe operating condition shall be removed from service. All repairs shall be made by authorized personnel.

All parts of any such industrial truck requiring replacement shall be replaced only by parts equivalent as to safety with those used in the original design.

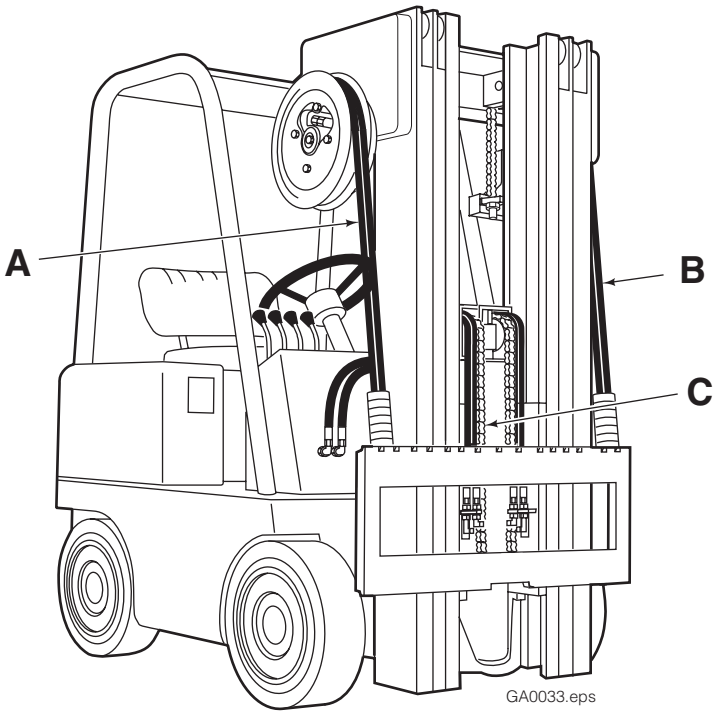
Industrial trucks shall not be altered so that the relative positions of the various parts are different from what they were when originally received from the manufacturer, nor shall they be altered either by the addition of extra parts not provided by the manufacturer or by the elimination of any parts. Additional counter-weighting of fork trucks shall not be done unless approved by the truck manufacturer.

Industrial trucks shall be examined before being placed in service and shall not be placed in service if the examination shows any condition adversely affecting the safety of the vehicle. Such examinations shall be made at least daily. When industrial trucks are used on a round-the-clock basis, they shall be examined after each shift. Defects when found shall be immediately reported and corrected.

Recommended Hydraulic Supply Options

10A Bin Dumpers can be operated with any of the hydraulic supply arrangements shown below. Refer to Cascade Hose & Cable Reel Selection Guide, Part No. 212199, to select the correct hose reel for the mast and truck. Hose and fitting requirements are as follows:

- Hoses and fittings for dump function should be at least No. 6 with 7 mm minimum ID.



A RH THINLINE™ 2-Port Hose Reel Group

OR

B LH THINLINE™ 2-Port Hose Reel Group

OR

C Single Internal Hose Reeving Group

WARNING: Rated Capacity of the truck/ attachment combination is a responsibility of the original truck manufacturer and may be less than that shown on the attachment nameplate. Consult the truck nameplate.

Truck Relief Setting

140 bar Recommended
160 bar Maximum

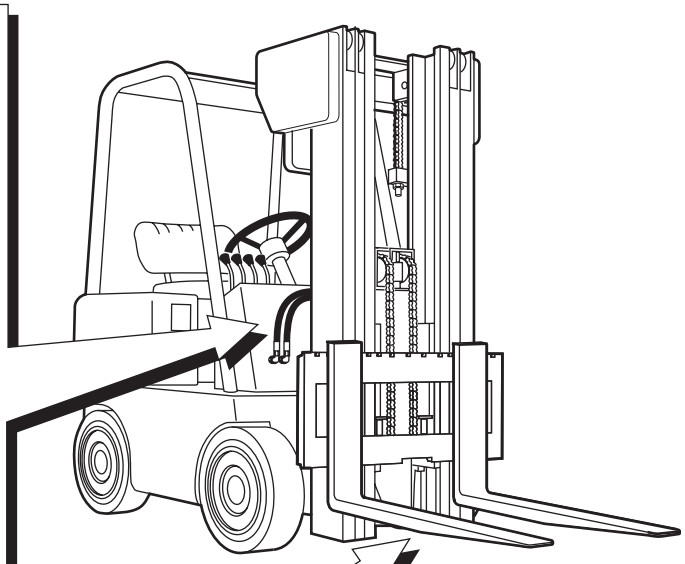
Truck Flow Volume ①

	Min. ②	Recommended	Max. ③
10A	19 L/min.	26 L/min.	38 L/min.

① Cascade Bin Dumpers are compatible with SAE 10W petroleum base hydraulic fluid meeting Mil. Spec. MIL-0-5606 or MIL-0-2104B. Use of synthetic or aqueous base hydraulic fluid is not recommended. If fire resistant hydraulic fluid is required, special seals must be used. Contact Cascade.

② Flow less than recommended will result in slower than normal dumping speed.

③ Flow greater than maximum can result in excessive heating, reduced system performance and short hydraulic system life.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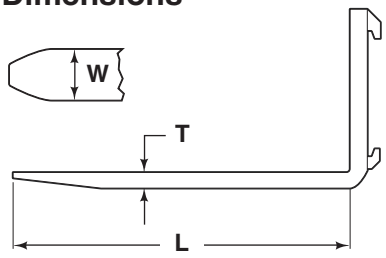
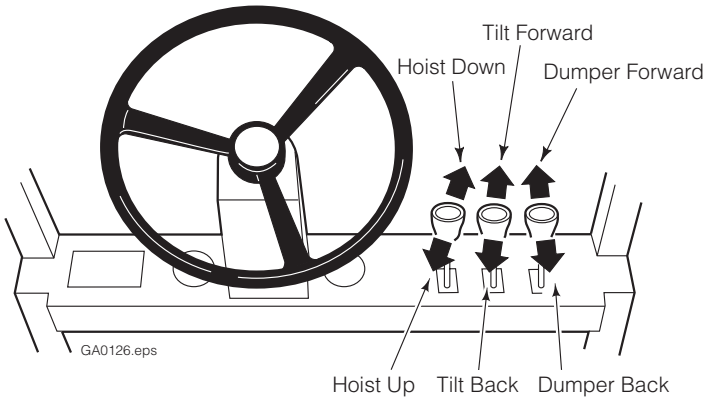
Maximum Fork Dimensions

Width (W) – 145 mm
Thickness (T) – 50 mm
Length (L) – 1100 mm



Auxiliary Valve Functions

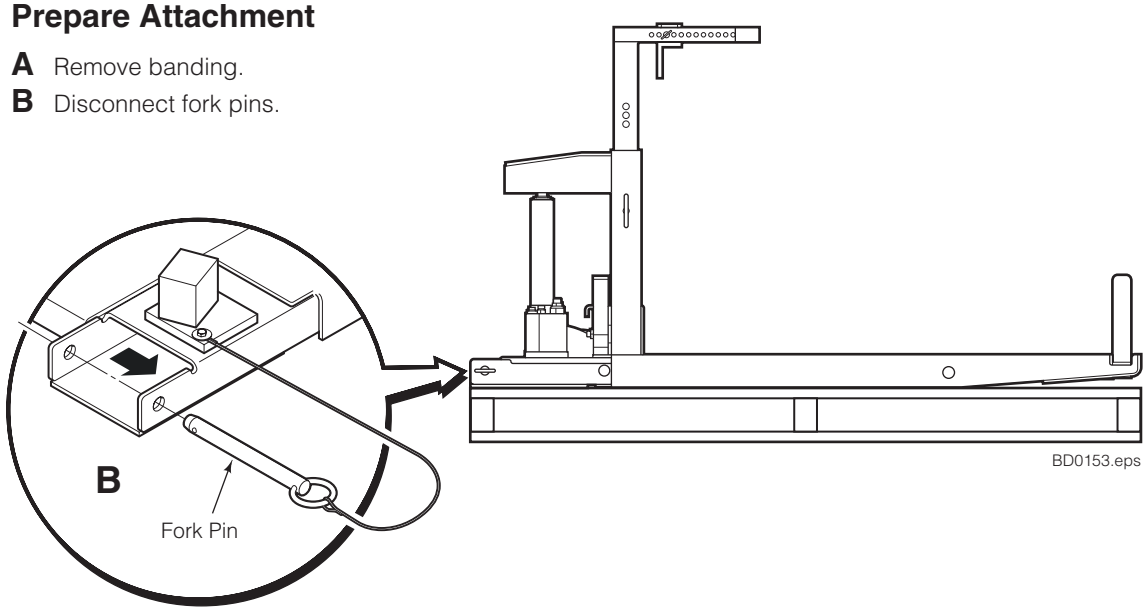
Check for compliance with ANSI Standards:



1 Prepare Attachment

A Remove banding.

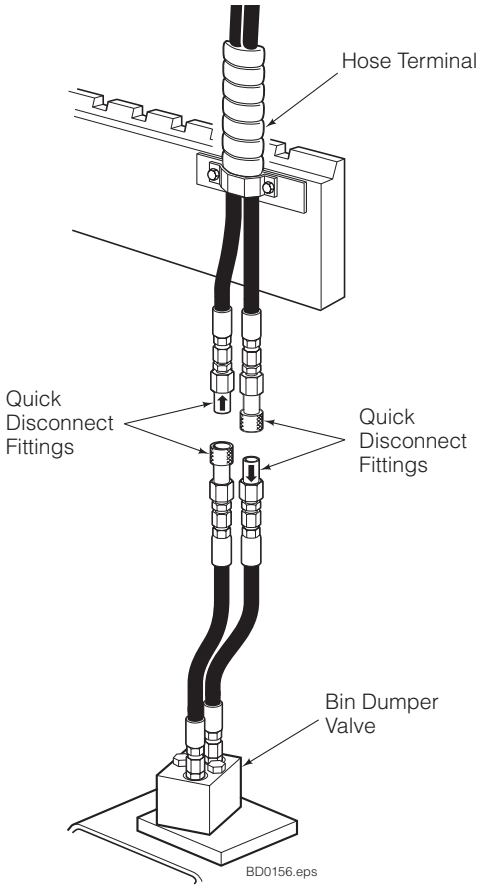
B Disconnect fork pins.



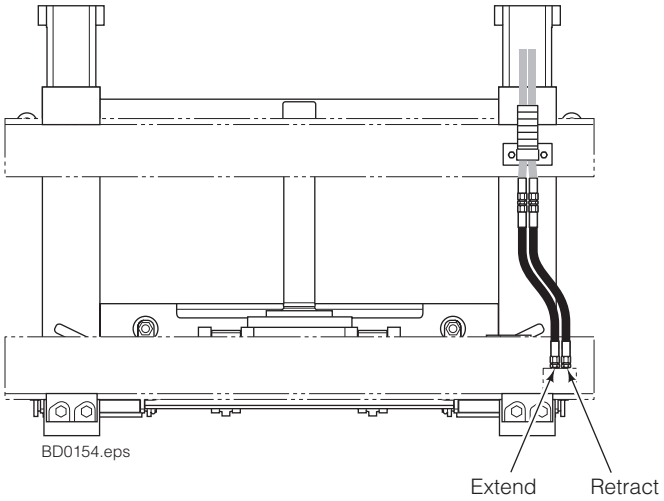
2 Prepare Hoses

A Determine hose lengths required for hydraulic supply.

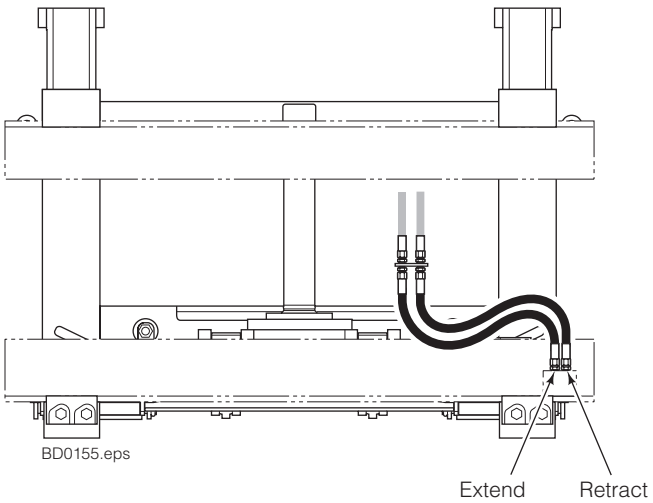
B Cut hoses to length, install end fittings or quick disconnect kits.



Hose Reel (RH shown)



Single Internal Hose Reeving (RH shown)

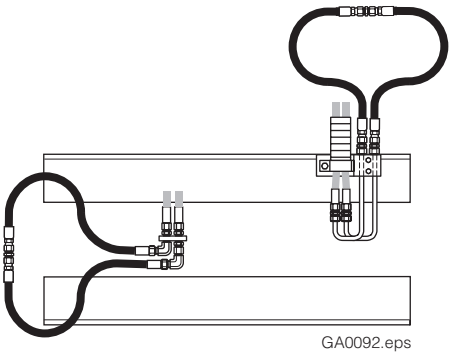


3 Flush hydraulic supply hoses

A Install hoses to hose terminals. Connect with union fittings.

B Operate auxiliary valves for 30 seconds.

C Remove union fittings.



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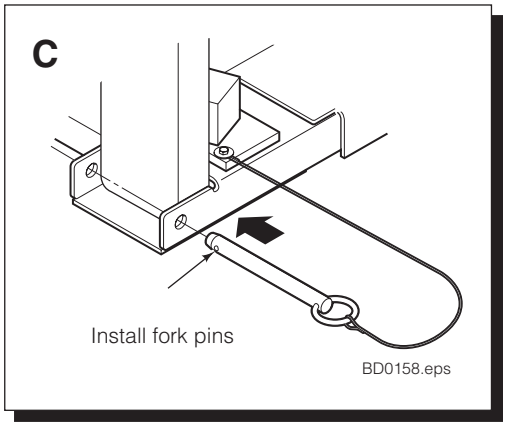
4 Mount bin dumper

A Position forks behind bin dumper.

B Drive forward inserting forks into rear fork pockets.

C Install fork pins behind fork heel.



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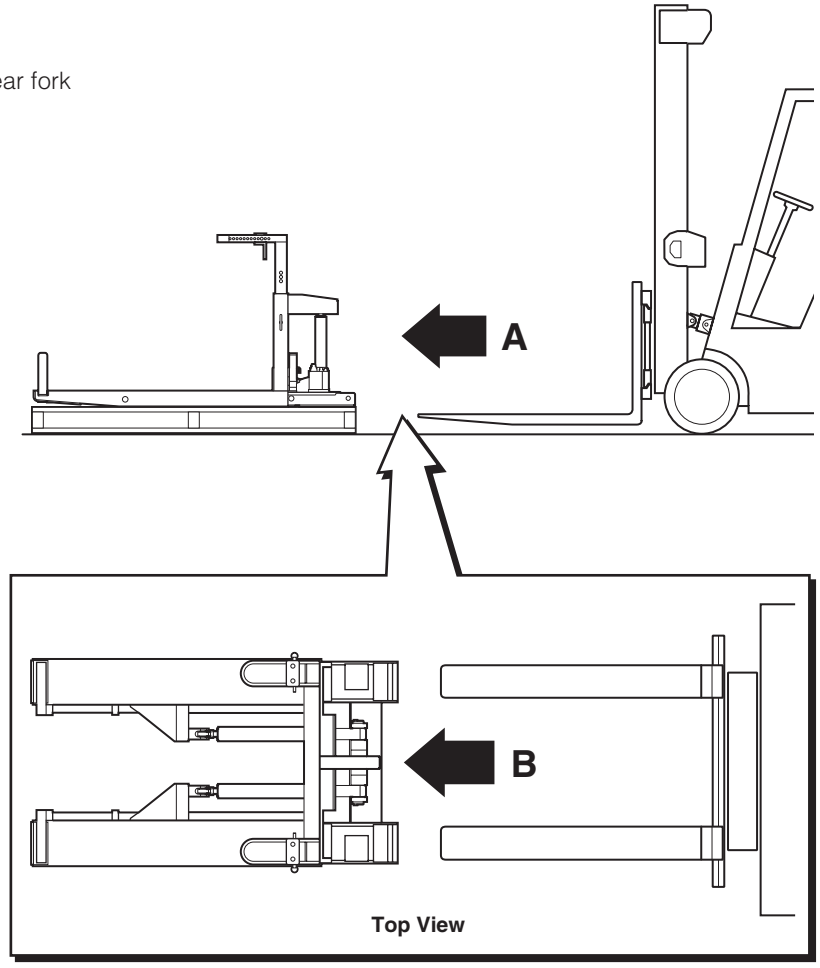

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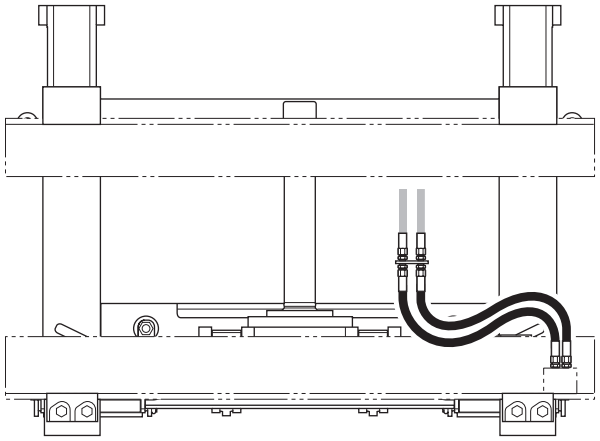
5 Connect Hoses

Single Internal Hose Reeving (RH shown)



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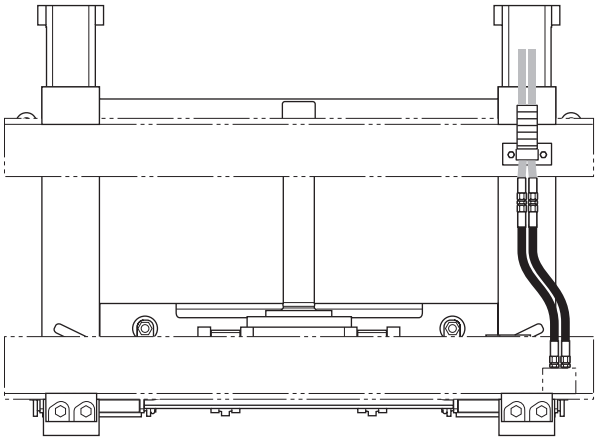
Hose Reel (RH shown)



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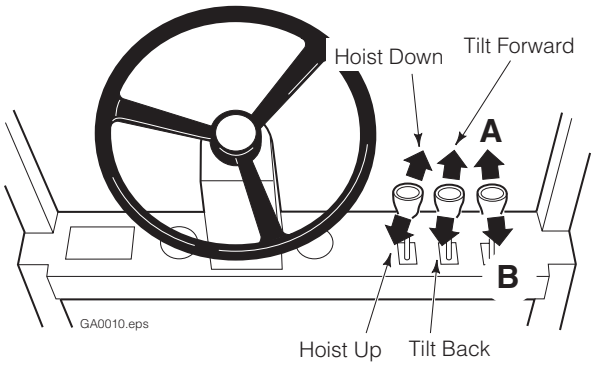
6 Cycle Attachment Function

- With no load, cycle dumper forward and back several times.
- With an empty bin, cycle dumper forward and back several times.
- Check for operation in accordance with ITA (ISO) standards.
- Check for leaks at fittings, valve and cylinders.



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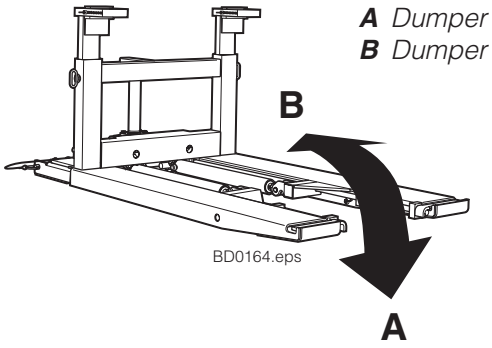

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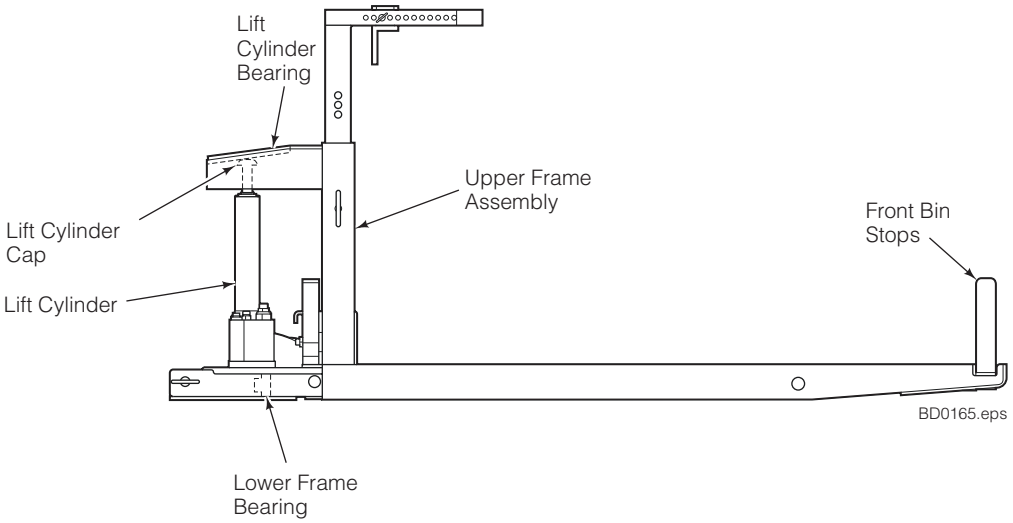
A *Dumper Forward*
B *Dumper Back*

100-Hour Maintenance

Every time the lift truck is service or every 100 hours of truck operation, whichever comes first, complete the following maintenance on the attachment:

- Check for loose or missing fasteners, worn or damaged hoses and hydraulic leaks.
- Inspect front bin stops for damage. If front stops do not go all the way down, loosen the domed nut jam nuts. Turn the outer nut CW 1/4 turn. Tighten nuts and test.
- Check that the fork pin detent locks when engaged.

WARNING: After completing any service procedure, always test each function through five complete cycles. First test with no load, then test with a load to make sure the attachment operates correctly before returning it to the job.

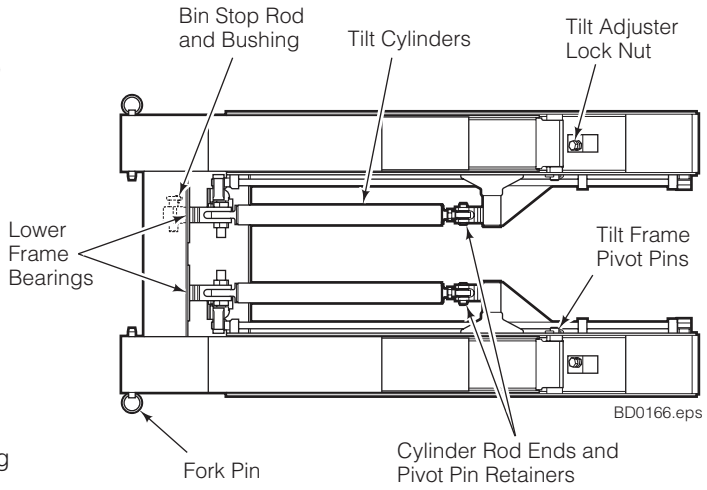


Side View

500-Hour Maintenance

After each 500 hours of truck operation, in addition to the 100-hour maintenance, perform the following procedures.

- Inspect tilt cylinder pivot pin retainers. If necessary tighten capscrews to 11–13 Nm.
- Inspect the front bin stop rod and bushings for wear. Replace as necessary.
- Inspect tilt frame pivot pin and bushings for wear. Replace as necessary. Tighten retainer capscrews to 11–13 Nm.
- Verify that the tilt frame rotates to 135°. If necessary adjust locknut located underneath the attachment.



Bottom View

1000-Hour Maintenance

After each 1000 hours of truck operation, in addition to the 100 and 500-hour maintenance, perform the following procedures.

- Inspect lower frame and lift cylinder bearings for wear. Replace as necessary. If the bearing is worn to less than 2.5 mm thickness, replace the bearing set. Refer to service manual for replacement procedure.
- Inspect lift cylinder cap for wear. Replace as necessary.

2000-Hour Maintenance

After 2000 hours of truck operation, in addition to the 100, 500 and 1000-hour maintenance, forks in use shall be inspected at intervals of not more than 12 months (for single shift operations) or whenever any defect or permanent deformation is detected. Severe applications will require more frequent inspection.

Fork inspection shall be carried out by trained personnel to detect any damage that might impair safe use. Any fork that is defective shall be removed from service. Reference ANSI B56.1-2005.

Inspect for the following defects:

- Surface cracks
- Straightness of blade and shank
- Fork angle
- Difference in height of fork tips
- Positioning lock
- Wear on fork blade and shank
- Wear on fork hooks
- Legibility of marking

NOTE: Fork Safety Kit 3014162 contains wear calipers, inspection sheets and safety poster. Also available is fork hook & carriage wear gauge 209560 (Class II) and 209561 (Class III).

Do you have questions you need answered right now? Call your nearest Cascade Service Department.
Visit us online at www.cascorp.com

En cas de questions urgentes,
contacter leservice d'entretien Cascade le plus proche.
Visiter le site Web www.cascorp.com.

Zijn er vragen waarop u direct een antwoord nodig hebt? Neem dan contact op met uwdichtstbijzijnde serviceafdeling van Cascade. Of ga naar www.cascorp.com

Per domande urgenti contattare
l'Ufficio Assistenza Cascade più vicino.
Visitate il nostro sito all'indirizzo www.cascorp.com

Haben Sie Fragen, für die Sie sofort eine Antwort benötigen? Wenden Sie sich anIhren nächsten Cascade-Kundendienst.
Besuchen Sie uns online: www.cascorp.com

¿Tiene alguna consulta que deba ser respondida de inmediato? Llame por teléfonoal servicio técnico de Cascade más cercano. Visítenos en www.cascorp.com

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